

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 07/06/2006

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 11/072,518 03/07/2005 Kia Silverbrook ZG208US 7248 **EXAMINER** 24011 7590 07/06/2006 SILVERBROOK RESEARCH PTY LTD DO, AN H **393 DARLING STREET** ART UNIT PAPER NUMBER BALMAIN, NSW 2041 **AUSTRALIA**

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
OIPE	11/072,518	SILVERBROOK, KIA
Office Action Summary	Examiner	Art Unit
JUL 1 1 2006	An H. Do	2853
The MAILING DATE of this communication pears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 25 M	ay 2006.	
·—	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex-parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
, 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5∳☐ Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-7</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)	. - -	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	ate ;
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) D Notice of Informal P	atent Application (PTO-152)
Paper No(s)/Mail Date	6)	,

13

Application/Control Number: 11/072,518

Art Unit: 2853

DETAILED ACTION

The Terminal Disclaimer and Response filed on 25 May 2006 have been acknowledged.

Terminal Disclaimer

1. The terminal disclaimer filed on 25 May 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,880,914 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Hermanson (US 5,581,284).

Hermanson discloses in Figures 1-7 the following claimed limitations:

Regarding claim 1, an inkjet printer (Figure 1, 12) for high-volume pagewidth printing comprises:

-a support structure (Figure 1, frame members 42 and upper and lower covers 43, 45);

)

Application/Control Number: 11/072,518

Art Unit: 2853

-a platen assembly (Figure 1, paper guide 40) positioned in the support structure (frame members 42 and upper and lower covers 43, 45), the platen assembly (Figure 1, paper guide 40) defining a pagewidth printing zone (space between the frame members 42);

-a print assembly (Figure 2, array printbars 14-17) positioned operatively with respect to the platen assembly (Figure 1, paper guide 40), the print assembly comprising:

-a chassis (supporting substrate 20) that is mounted on the support structure (column 4, lines 23-30) to span the printing zone;

-a plurality of printhead modules (30) positioned on the chassis (supporting substrate 20), each printhead module (30) having a carrier, a printhead chip (subunits 22) mounted on the carrier and a flexible printed circuit board (ribbon cable 27) connected to the chip (22) to provide the chip with control signals, the printhead modules (30) being positioned consecutively along the width of the printing zone so that the printhead chips (22) overlie the printing zone (column 2, lines 59 to column 3, lines 1-6); and

-a plurality of printed circuit boards (26) mounted on the chassis (supporting substrate 20), each printed circuit board (26) having control circuitry that is connected to a predetermined number of printhead chips (subunits 22); and

-a feed mechanism (paper guides 40, column 3, lines 55-56) for feeding print media (18) through the printing zone, over the platen assembly.

Application/Control Number: 11/072,518

Art Unit: 2853

Regarding claim 3, which includes an ink distribution arrangement (Figure 2, manifolds 30) mounted on the chassis (supporting substrate 20) to supply the printhead chips (subunits 22) with ink, and an ink reservoir assembly (subunit reservoirs 29) also mounted on the chassis (supporting substrate 20) and in fluid communication with the ink distribution arrangement (manifolds 30) to supply the ink distribution arrangement with ink (column 3, lines 23-27).

Regarding claim 4, in which the ink reservoir assembly includes an ink reservoir structure (subunit reservoirs 29) that defines a plurality of elongate channels (Figure 2) that extend across the printing zone (space between the frame members 42), differently colored inks (Figures 3-6) being received in respective channels, each channel being connectable to a respective ink cartridge with a suitable ink conduit (column 3, lines 30-32).

Regarding claim 5, in which each printhead module (each subunit 22) is detachably mounted on the chassis (supporting substrate 20) to facilitate replacement of the printhead module (column 2, lines 59 to column 3, lines 1-4).

Regarding claim 7, which includes a plurality of capping devices (Figure 7 shows only one removable cap 74 for printbar 17, column 5, lines 43-45), associated with respective printhead modules (array printbars 14-17), the capping device (removable cap 74) being mounted on the chassis (Figure 7) and being displaceable (removable) between an operative position in which the capping device (removable cap 74) serves to cap the printhead chip (subunits 22) of its associated module (array printbars 14-17)

and an inoperative position in which the capping device (removable cap 74) is displaced from the printhead chip (column 3, lines 52-65).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hermanson (US 5,581,284) in view of Garcia et al (US 6,076,913).

Hermanson discloses the claimed invention except for reciting the support structure including a pair of spaced feet and a leg extending from each foot, the print assembly being mounted on the legs to span the legs; and the feed mechanism includes a media roll.

Garcia et al teach in Figures 1 and 18A that the support structure including a pair of spaced feet (54) and a leg extending from each foot, the print assembly (50, 52) being mounted on the legs to span the legs; and the feed mechanism includes a media roll (Figure 18A, media roll 270).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the support structure including a pair of spaced feet and a leg extending from each foot, the print assembly being mounted on the legs to span the legs; and the feed mechanism includes a media roll, as taught by Garcia et al into Hermanson, for, the purpose of supporting the full length of a pagewidth printhead.

Application/Control Number: 11/072,518 Page 6

Art Unit: 2853

Response to Arguments

6. Applicant's arguments filed 25 May 2006 have been fully considered but they are not persuasive. Applicant argued that Hermanson failed to disclose the printhead modules are positioned consecutively along the width of the printing zone. This argument is not found persuasive because Figure 2 of Hermanson shows printbar (14) comprising two printhead modules (30) with chips (22) connected consecutively along the width (from left to right) of the printing zone.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143.

The examiner can normally be reached on Monday-Friday (Flexible).

Art Unit: 2853

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD June 24, 2006 An H. Do **Primary Examiner**

Art Unit 2853

Organization I C C J U Bldg.Room UNITED STATES PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria VA 22212

Alexandria, VA. 22313-1450 If Undeliverable Return In Ten Days

Official Business Penalty For Private Use, \$300

AN EQUAL OPPORTUNITY EMPLOYER

USPTOMAIL CENTER

Solut/Noc

m.m.m.m.h.h.h.m.h.m.h.m.h.m